

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 33.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JORN LEIBER, BERND LUHMANN, THOMAS RAADTS,
RALF SCHLIEPHACKE, PETER KUBASCH, JAN CHAL, HANSJURGEN LINDE,
UWE NEUMANN and HANS HAZES

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MAR 26 2003

Appeal No. 2002-2278
Application No. 08/976,820

**PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES**

HEARD: March 5, 2003

Before PAK, LORIN and JEFFREY T. SMITH, Administrative Patent
Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 20 through 31. Claims 32 and 33, the remaining claims in the above-identified application, have been indicated to be allowable. See the Answer, page 3.

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APPEALED SUBJECT MATTER

According to appellants (Brief, page 12), "[t]he claims on appeal do not all stand or fall together." The appellants then provide substantive arguments for the separate patentability of the subject matter recited in claims 20, 21, 22, 27 and 31 consistent with 37 CFR § 1.192(c)(7) and (c)(8)(2001). See the Brief, pages 12-23. Therefore, for purposes of this appeal, we select claims 20, 21, 22, 27 and 31 from the claims on appeal and determine the propriety of the examiner's rejection based on these claims alone consistent with 37 CFR § 1.192(c)(7) (2001). Claims 20, 21, 22, 27 and 31 are reproduced below:

20. An adhesive tape section comprising an adhesive region and a plurality of grip tabs, said adhesive tape section being designed as a polygon having a number of sides and the same number of grip tabs, wherein the adhesive tape section, when bonded to a substrate, forms a bond with said substrate, which bond is releaseable from said substrate by pulling on at least one of said grip tabs in the plane of said bond to stretch said adhesive tape section in the plane of said bond thereby to release said adhesive tape section from said substrate.

21. The adhesive tape section according to claim 20, which is designed as a triangle, and comprises three grip tabs, and one of said grip tabs is arranged in each of the angles of said triangle.

22. The adhesive tape section according to claim 20, which is designed as a quadrangle, and comprises four grip tabs, and one said grip tabs is arranged in each of the angles of said quadrangle.

27. An adhesive tape section comprising an adhesive region and a grip tab, said adhesive tape section being designed as a circle, the adhesive region occupying a central portion of said circle, said grip tab occupying an outer portion of said circle, and said grip tab surrounding said adhesive region, wherein the adhesive tape section, when bonded to a substrate, forms a bond with said substrate, which bond is releaseable from said substrate by pulling said grip tab in the plane of said bond to stretch said adhesive tape section in the plane of said bond thereby to release said adhesive tape section from said substrate.

31. A method of forming a bond between an adhesive tape section and a substrate, and thereafter releasing said adhesive tape section from said substrate without leaving a residue on said substrate or destroying the substrate, said method comprising providing an adhesive tape section according to any one of claims 20-30, forming a bond between said adhesive tape section and said substrate, and thereafter releasing said adhesive tape section from said substrate without leaving a residue on said substrate or destroying the substrate by pulling on at least one of said grip tabs in the plane of said bond to stretch said adhesive tape section in the plane of said bond thereby to release said adhesive tape section from said substrate without leaving a residue on said substrate or destroying the substrate.

PRIOR ART

The examiner relies on the following prior art references:

Cole	5,622,761	Apr. 22, 1977 (Filed Feb. 27, 1995)
Luhmann	5,725,923	Mar. 10, 1998 (Filed Nov. 15, 1994)

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REJECTION

Claims 20 through 31 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Luhmann and Cole.

OPINION

We have carefully reviewed the claims, specification and prior art, including all of the arguments advanced by both the examiner and the appellants in support of their respective positions. This review has led us to conclude that the examiner's Section 103 rejection is well founded. Accordingly, we will sustain the examiner's Section 103 rejection for the reasons set forth in the Answer and below.

The examiner finds that Luhmann specifically teaches a releaseable double-sided adhesive tape which can be removed via pulling tabs attached thereto in the bond plan. See the Answer, page 4. This finding is supported by Luhmann which discloses in relevant parts (column 2, lines 27-42 and column 2, line 57 to column 3, line 10):

Removal of the fixed object without leaving a residue is possible in a simple manner by pulling the object in the direction of the adhesive film longitudinal direction parallel to the bond plane. The separation process is intended to take place in such a way that the adhering areas separate from one another. Simple removal of the bonded object is achieved by the **stretching** of the double-sided self-adhesive tape starting from the centre of the adhesive film. The drop in adhesion which occurs is favoured by reducing the tack of the self-

adhesive composition analogously to DE 33 31 016 and DE 42 22 849, and by reducing the adhesive film thickness, caused by the **stretching of the adhesive film**.

The pulling need not be carried out precisely. Neither is it necessary to pull precisely so that the adhesive areas separate from one another, since even pulling at an angle, even right angles, is successful, although less elegant

.
In these embodiments according to the invention with an adhesive film of the rather more classical type of a self-adhesive composition as widely employed for adhesive tapes, the separation of the pulled-apart parts is less easy after breaking of the bond. However, this is relatively unimportant for some applications, in particular if the residues can remain on the substrates without causing any problems. **However, if in this and other cases the residues are to be more easily removable, a tab is recommended in each case to enable easier pulling on the residue. Such a tab can be designed, in particular, so that the non-adhesive areas extend around an edge of the piece of adhesive film, for example a few millimetres beyond the adhesive area beneath.**

The shear loadability of the adhesive bonds produced with the novel adhesive films is determined through:
the force which must be applied to stretch the adhesive film (adhesive composition plus any intermediate support) in the longitudinal direction.
in the case of slight overlapping on the non-adhesive areas, the shear strength of the adhesive film on these.

The examiner recognizes that Luhmann does not specifically mention the shape of its double-sided adhesive tape (adhesive region). See the Answer, page 4. To remedy this deficiency, the examiner relies on the disclosure of Cole. See the Answer, page 5. Cole discloses releaseable "flexible" double-sided adhesive tapes which are in a variety of different adhesive patterns and shapes, preferably in geometrical shapes, inclusive of circles, rectangles,

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triangle and polygons. See the abstract, together with column 2, lines 36-44, column 3, lines 18-20, column 4, lines 11-21, column 5, lines 29-41 and column 10, lines 4-14.

Given these teachings, we concur with the examiner that one of ordinary skill in the art would have been led to design the double-side adhesive tape described in Luhmann in various shapes, including the claimed geometrical shapes, with grip tabs attached to and surrounding part or the entire area of the edge of the adhesive tape, with a reasonable expectation of successfully forming double-sided adhesive tapes having the advantageous properties indicated in Luhmann.

The appellants argue that the prior art references as a whole do not teach or would have suggested placing grip tabs to each and every side of given geometrically shaped adhesive tapes. See the Brief, pages 16-22, and the Reply Brief, page 2. We do not agree.

As acknowledged by the appellants (Brief, page 16), Luhmann exemplifies a plurality of grip tabs attached to two different sides of a quadrangle shaped adhesive tape. See also Luhmann, columns 5 and 6, example 8. We find that Luhmann also broadly discloses (column 2, line 65 to column 3, line 1) that:

[A] tab is recommended in each case to enable easier pulling on the residue. Such a tab can be designed, in particular, so

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that the non-adhesive areas extend around an edge of the piece of adhesive film.

It can be inferred from these teachings that grip tabs can be provided to each and every side or some of the sides of a given geometrically shaped adhesive tape to substantially or fully surround the tape's edge. See *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968) ("in considering the disclosure of a reference, it is proper to take into account not only specific teachings, but also the inferences which one skilled in the art would reasonably expected to draw therefrom"). Moreover, from our perspective, it is well within the ambit of one of ordinary skill in the art to provide an appropriate number of grip tabs, including the number of grip tabs corresponding to the sides of given geometrically shaped adhesive tapes, to provide contingent bases in the case of failure of one or more grip tabs in removing the adhesive tapes since Luhmann teaches that the grib tabs can be pulled at any angle and are used to remove the residues of the adhesive tapes as indicated *supra*. See *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985) (skill is presumed on the part of those practicing in the art); *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969) (the conclusion of obviousness

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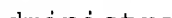
may be made from "common knowledge and common sense" of the person of ordinary skill in the art).

Under these circumstances, we determine that the evidence of obviousness, on balance, outweighs the evidence of nonobviousness proffered by the appellants. Hence, we conclude that the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art in view of the applied prior art references within the meaning of 35 U.S.C. § 103. Accordingly, we affirm the examiner's decision rejecting all of the claims on appeal under 35 U.S.C. § 103.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED


CHUNG K. PAK
Administrative Patent Judge


HUBERT C. LORIN
Administrative Patent Judge

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JEFFREY T. SMITH
Administrative Patent Judge

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